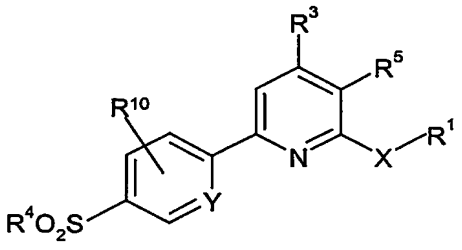
CLAIMS

1. A compound of formula (I)

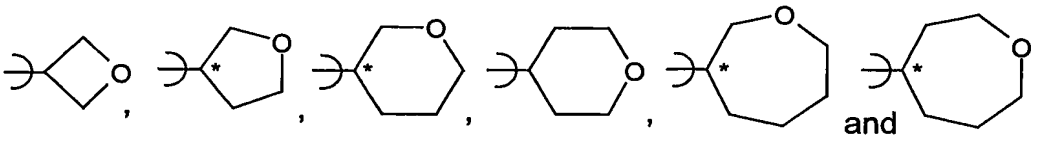


(I)

or a pharmaceutically acceptable salt thereof in which:

X is selected from the group consisting of oxygen or NR^2;
Y is selected from the group consisting of CH or nitrogen;
R^1 is selected from the group consisting of H, C_{1-6}alkyl, C_{1-2}alkyl substituted by one to five fluorine atoms, C_{1-3}alkylOC_{1-3}alkyl, C_{3-6}alkenyl, C_{3-6}alkynyl, C_{3-10}cycloalkylC_{0-6}alkyl, C_{4-7}cycloalkyl substituted by C_{1-3}alkyl or C_{1-3}alkoxy, C_{4-12}bridged cycloalkyl, $A(CR^6R^7)_n$ and $B(CR^6R^7)_n$;
R^2 is selected from the group consisting of H and C_{1-6}alkyl; or
R^1 and R^2, together with the nitrogen atom to which they are attached form a 4-8 membered saturated heterocyclic ring such as a pyrrolidine, morpholine or piperidine ring, or a 5-membered heteroaryl ring which is unsubstituted or substituted by one R^8;
R^3 is selected from the group consisting of C_{1-5}alkyl and C_{1-2}alkyl substituted by one to five fluorine atoms;
R^4 is selected from the group consisting of C_{1-6}alkyl, NH_2 and R^9CONH;
R^5 is selected from the group consisting of hydrogen, C_{1-3}alkyl, C_{1-2}alkyl substituted by one to five fluorine atoms, C_{1-3}alkylO_2C, halogen, cyano, $(C_{1-3}alkyl)_2NCO$, C_{1-3}alkylS and C_{1-3}alkylO_2S;
R^6 and R^7 are independently selected from H or C_{1-6}alkyl;
A is an unsubstituted 5- or 6-membered heteroaryl or an unsubstituted 6-membered aryl, or a 5- or 6-membered heteroaryl or a 6-membered aryl substituted by one or more R^8;

R^8 is selected from the group consisting of halogen, C_{1-6}alkyl, C_{1-6}alkyl substituted by one more fluorine atoms, C_{1-6}alkoxy, C_{1-6}alkoxy substituted by one or more F, NH_2SO_2 and C_{1-6}alkylSO_2;
B is selected from the group consisting of

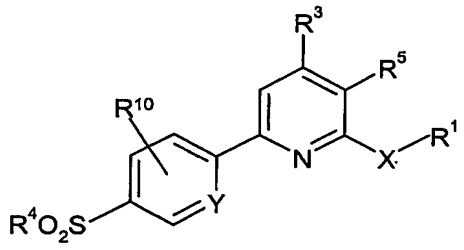


and where

) defines the point of attachment of the ring;

R^9 is selected from the group consisting of H, C_{1-6}alkyl, C_{1-6}alkoxy, C_{1-6}alkylOC_{1-6}alkyl, phenyl, HO_2CC_{1-6}alkyl, C_{1-6}alkyl$OCOC_{1-6}$alkyl, C_{1-6}alkylOCO, H_2NC_{1-6}alkyl, C_{1-6}alkyl$OCONHC_{1-6}$alkyl and C_{1-6}alkyl$CONHC_{1-6}$alkyl;
R^{10} is selected from the group consisting of H and halogen; and
n is 0 to 4.

2. A compound as claimed in claim 1 of formula (IA)

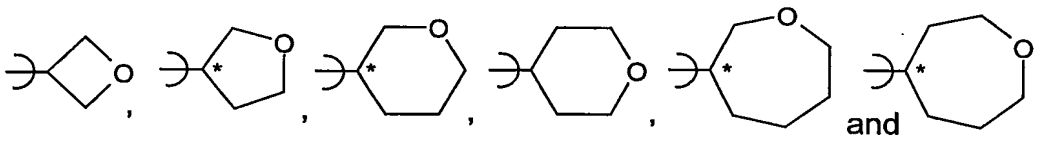


(IA)

or a pharmaceutically acceptable salt thereof in which:

X is selected from the group consisting of oxygen or NR^2;
Y is selected from the group consisting of CH or nitrogen;
R^1 is selected from the group consisting of H, C_{1-6}alkyl, C_{1-2}alkyl substituted by one to five fluorine atoms, C_{1-3}alkylOC_{1-3}alkyl, C_{3-6}alkenyl, C_{3-6}alkynyl, C_{3-10}cycloalkylC_{0-6}alkyl, C_{4-12}bridged cycloalkyl, $A(CR^6R^7)_n$ and $B(CR^6R^7)_n$;
R^2 is selected from the group consisting of H and C_{1-6}alkyl; or
R^1 and R^2, together with the nitrogen atom to which they are attached form a 4-8 membered saturated heterocyclic ring such as a pyrrolidine, morpholine or piperidine ring;

R^3 is selected from the group consisting of C_{1-5}alkyl and C_{1-2}alkyl substituted by one to five fluorine atoms;
R^4 is selected from the group consisting of C_{1-6}alkyl, NH_2 and R^9CONH;
R^5 is selected from the group consisting of hydrogen, C_{1-3}alkyl, C_{1-2}alkyl substituted by one to five fluorine atoms, halogen, cyano, $(C_{1-3}alkyl)_2NCO$, $C_{1-3}alkylS$ and $C_{1-3}alkylO_2S$;
R^6 and R^7 are independently selected from H or C_{1-6}alkyl;
A is an unsubstituted 5- or 6-membered heteroaryl or an unsubstituted 6-membered aryl, or a 5- or 6-membered heteroaryl or a 6-membered aryl substituted by one or more R^8;
R^8 is selected from the group consisting of halogen, C_{1-6}alkyl, C_{1-6}alkyl substituted by one more fluorine atoms, C_{1-6}alkoxy, C_{1-6}alkoxy substituted by one or more F, NH_2SO_2 and $C_{1-6}alkylSO_2$;
B is selected from the group consisting of

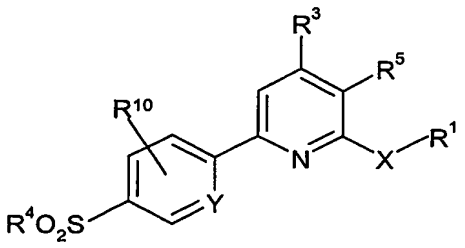


and where

) defines the point of attachment of the ring;

R^9 is selected from the group consisting of H, C_{1-6}alkyl, C_{1-6}alkoxy, $C_{1-6}alkylOC_{1-6}$alkyl, phenyl, HO_2CC_{1-6}alkyl, $C_{1-6}alkylOCOC_{1-6}$alkyl, $C_{1-6}alkylOCO$, H_2NC_{1-6}alkyl, $C_{1-6}alkylOCONHC_{1-6}$alkyl and $C_{1-6}alkylCONHC_{1-6}$alkyl;
R^{10} is selected from the group consisting of H and halogen; and
n is 0 to 4.

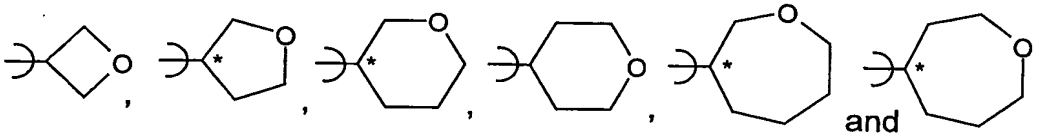
3. A compound as claimed in claim 1 of formula (IC)



(IC)

or a pharmaceutically acceptable salt thereof in which:

X is selected from the group consisting of oxygen or NR^2;
Y is selected from the group consisting of CH or nitrogen;
R^1 is selected from the group consisting of H, C_{1-6}alkyl, C_{1-2}alkyl substituted by one to five fluorine atoms, C_{1-3}alkylOC_{1-3}alkyl, C_{3-6}alkenyl, C_{3-6}alkynyl, C_{3-10}cycloalkylC_{0-6}alkyl, C_{4-7}cycloalkyl substituted by C_{1-3}alkyl or C_{1-3}alkoxy, C_{4-12}bridged cycloalkyl, $A(CR^6R^7)_n$ and $B(CR^6R^7)_n$;
R^2 is selected from the group consisting of H and C_{1-6}alkyl; or
R^1 and R^2, together with the nitrogen atom to which they are attached form a 4-8 membered saturated heterocyclic ring such as a pyrrolidine, morpholine or piperidine ring, or a 5-membered heteroaryl ring which is unsubstituted or substituted by one R^8;
R^3 is selected from the group consisting of C_{1-5}alkyl and C_{1-2}alkyl substituted by one to five fluorine atoms;
R^4 is selected from the group consisting of C_{1-6}alkyl, NH_2 and R^9CONH;
R^5 is selected from the group consisting of hydrogen, C_{1-3}alkyl, C_{1-2}alkyl substituted by one to five fluorine atoms, C_{1-3}alkylO_2C, halogen, cyano, $(C_{1-3}alkyl)_2NCO$, C_{1-3}alkyl$S$ and C_{1-3}alkylO_2S;
R^6 and R^7 are independently selected from H or C_{1-6}alkyl;
A is an unsubstituted 5- or 6-membered heteroaryl or an unsubstituted 6-membered aryl, or a 5- or 6-membered heteroaryl or a 6-membered aryl substituted by one or more R^8;
R^8 is selected from the group consisting of halogen, C_{1-6}alkyl, C_{1-6}alkyl substituted by one more fluorine atoms, C_{1-6}alkoxy, C_{1-6}alkoxy substituted by one or more F, NH_2SO_2 and C_{1-6}alkylSO_2;
B is selected from the group consisting of



and where

) defines the point of attachment of the ring;

R^9 is selected from the group consisting of H, C_{1-6}alkyl, C_{1-6}alkoxy, C_{1-6}alkylOC_{1-6}alkyl, phenyl, HO_2CC_{1-6}alkyl, C_{1-6}alkyl$OCOC_{1-6}$alkyl, C_{1-6}alkylOCO, H_2NC_{1-6}alkyl, C_{1-6}alkyl$OCONHC_{1-6}$alkyl and C_{1-6}alkyl$CONHC_{1-6}$alkyl;
R^{10} is selected from the group consisting of H and halogen; and
n is 1 to 4.

4. A compound as claimed in claim 1 wherein:

X is oxygen;
Y is CH;
R^1 is $A(CR^6R^7)_n$;
R^3 is selected from the group consisting of C_{1-5}alkyl and C_{1-2}alkyl substituted by one to five fluorine atoms;
R^4 is C_{1-6}alkyl;
R^5 is selected from the group consisting of hydrogen, C_{1-3}alkyl, C_{1-2}alkyl substituted by one to five fluorine atoms, C_{1-3}alkylO_2C, halogen, and C_{1-3}alkylS;
A is an unsubstituted 5- or 6-membered heteroaryl or an unsubstituted 6-membered aryl, or a 5- or 6-membered heteroaryl or a 6-membered aryl substituted by one or more R^8;
R^8 is selected from the group consisting of halogen, C_{1-6}alkyl, C_{1-6}alkyl substituted by one more fluorine atoms, C_{1-6}alkoxy, and C_{1-6}alkoxy substituted by one or more F;
R^{10} is selected from the group consisting of H and halogen; and
n is 0.

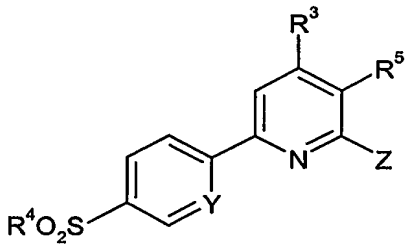
5. A compound of formula (I) as described in any of Examples 1 to 236.

6. A compound of formula (I) selected from the group consisting of:
4-ethyl-6-[4-(methylsulfonyl)phenyl]-N-(tetrahydro-2H-pyran-4-ylmethyl)-2-pyridinamine;4-methyl-N-[(1-methyl-1H-pyrazol-4-yl)methyl]-6-[4-(methylsulfonyl)phenyl]-2-pyridinamine;
N-[(1,5-dimethyl-1H-pyrazol-4-yl)methyl]-4-methyl-6-[4-(methylsulfonyl)phenyl]-2-pyridinamine;
N-[(1,3-dimethyl-1H-pyrazol-4-yl)methyl]-4-methyl-6-[4-(methylsulfonyl)phenyl]-2-pyridinamine;
4-(6-{[(1,3-dimethyl-1H-pyrazol-4-yl)methyl]amino}-4-ethyl-2-pyridinyl)benzenesulfonamide;
N-[(1,3-dimethyl-1H-pyrazol-4-yl)methyl]-6-[4-(methylsulfonyl)phenyl]-4-(trifluoromethyl)-2-pyridinamine;
N-[(1,5-dimethyl-1H-pyrazol-4-yl)methyl]-6-[4-(methylsulfonyl)phenyl]-4-(trifluoromethyl)-2-pyridinamine;

4-{4-methyl-6-[(tetrahydro-2H-pyran-4-ylmethyl)amino]-2-pyridinyl}benzenesulfonamide;
4-methyl-N-[(1-methyl-1H-pyrazol-3-yl)methyl]-6-[4-(methylsulfonyl)phenyl]-2-pyridinamine;
N-(cyclohexylmethyl)-6-[4-(methylsulfonyl)phenyl]-4-(trifluoromethyl)-2-pyridinamine;
N-cyclohexyl-6-[4-(methylsulfonyl)phenyl]-4-(trifluoromethyl)-2-pyridinamine;
2-[4-(methylsulfonyl)phenyl]-6-[(2-pyridinylmethyl)oxy]-4-(trifluoromethyl)pyridine;
4-methyl-N-[(3-methyl-4-isoxazolyl)methyl]-6-[4-(methylsulfonyl)phenyl]-2-pyridinamine;
6-[4-(methylsulfonyl)phenyl]-N-(2-pyridinylmethyl)-4-(trifluoromethyl)-2-pyridinamine;
N-cycloheptyl-6-[4-(methylsulfonyl)phenyl]-4-(trifluoromethyl)-2-pyridinamine;
N-(cis-4-methylcyclohexyl)-6-[4-(methylsulfonyl)phenyl]-4-(trifluoromethyl)-2-pyridinamine;
N-(1-ethylpropyl)-6-[4-(methylsulfonyl)phenyl]-4-(trifluoromethyl)-2-pyridinamine;
N-[(3-methyl-1,2,4-oxadiazol-5-yl)methyl]-6-[4-(methylsulfonyl)phenyl]-4-(trifluoromethyl)-2-pyridinamine;
N-[(5-methyl-1,2,4-oxadiazol-3-yl)methyl]-6-[4-(methylsulfonyl)phenyl]-4-(trifluoromethyl)-2-pyridinamine;
4-methyl-N-[(1-methyl-1H-pyrazol-5-yl)methyl]-6-[4-(methylsulfonyl)phenyl]-2-pyridinamine;
N-(cyclopentylmethyl)-6-[4-(methylsulfonyl)phenyl]-4-(trifluoromethyl)-2-pyridinamine;
N-[(1-ethyl-1H-1,2,4-triazol-5-yl)methyl]-4-methyl-6-[4-(methylsulfonyl)phenyl]-2-pyridinamine;
4-ethyl-6-[4-(methylsulfonyl)phenyl]-2-[(2-pyridinylmethyl)amino]-3-pyridinecarbonitrile;
4-ethyl-2-{[(5-methyl-2-pyridinyl)methyl]amino}-6-[4-(methylsulfonyl)phenyl]-3-pyridinecarbonitrile;
4-ethyl-2-{[(6-methyl-3-pyridinyl)methyl]amino}-6-[4-(methylsulfonyl)phenyl]-3-pyridinecarbonitrile;

4-ethyl-2-{[(1-methyl-1H-pyrazol-4-yl)methyl]amino}-6-[4-(methylsulfonyl)phenyl]-3-pyridinecarbonitrile;
4-ethyl-6-[4-(methylsulfonyl)phenyl]-2-{[(4-methyl-1,3-thiazol-2-yl)methyl]amino}-3-pyridinecarbonitrile;
4-ethyl-6-[4-(methylsulfonyl)phenyl]-2-[(2-pyridinylmethyl)oxy]-3-pyridinecarbonitrile;
4-ethyl-N-[(1-ethyl-1H-1,2,4-triazol-5-yl)methyl]-6-[4-(methylsulfonyl)phenyl]-2-pyridinamine;
4-ethyl-2-{[(6-methyl-3-pyridinyl)methyl]oxy}-6-[4-(methylsulfonyl)phenyl]-3-pyridinecarbonitrile; and
6-[4-(methylsulfonyl)phenyl]-N-[(1-methyl-1H-1,2,4-triazol-5-yl)methyl]-4-(trifluoromethyl)-2-pyridinamine.

7. A process for the preparation of compounds of formula (I) as defined in any of claims 1 to 6 which comprises reacting a compound R^1XH of formula (II), or a protected derivative thereof, with a compound of formula (III)



(III)

where X is as defined and Z is halogen or a sulfonate, and thereafter and if necessary, interconverting a compound of formula (I) into another compound of formula (I), and/or deprotecting a protected derivative of compound of formula (I).

8. A pharmaceutical composition comprising a compound of formula (I) as defined in any of claims 1 to 6 in admixture with one or more physiologically acceptable carriers or excipients.

9. A compound of formula (I) as defined in any of claims 1 to 6 for use in human or veterinary medicine.

10. A method of treating a human or animal subject suffering from a condition which is mediated by COX-2 which comprises administering to said subject

an effective amount of a compound of formula (I) as defined in any of claims 1 to 6.

11. A method of treating a human or animal subject suffering from an inflammatory disorder, which method comprises administering to said subject an effective amount of a compound of formula (I) as defined in any of claims 1 to 6.

12. The use of a compound of formula (I) as defined in any of claims 1 to 6 for the manufacture of a therapeutic agent for the treatment of a condition which is mediated by COX-2.

13. The use of a compound of formula (I) as defined in any of claims 1 to 6 for the manufacture of a therapeutic agent for the treatment of an inflammatory disorder.